

Remarks

As indicated in the Office action dated March 1, 2007, Claims 25-30 and 34-46 are pending in the application. By this Amendment, Applicant has amended Claims 25, 26, 30, 34-36, and 41. New claim 52 has been added. No new matter has been added.

I. Claim Rejections - 35 U.S.C. § 112

Claims 35 and 36 stand rejected under 35 U.S.C. § 112, second paragraph for lack of proper antecedent basis for the limitation “template element.” In response, Applicant has amended Claims 35 and 36 to provide proper antecedent basis.

II. Claim Rejections - 35 U.S.C. § 101

Claims 25-30 and 34-46 stand rejected under 35 U.S.C. § 101 as being directed to nonfunctional descriptive material. In response to this rejection, Applicant has amended independent Claims 25 and 34 to recite a computer readable medium having instructions for generating instances of a document based on a template having a schema. Accordingly, Claims 25-30 and 34-45 recite a functional relationship between a data structure and a computing process performed when using the data structure. In particular, Claims 25-30 and 34-45 recite how the data structure is used and how it causes a functional change in a computer, which returns a practical result (e.g., an instance of a document). Accordingly, Applicant believes that Claims 25-30 and 34-46 recite statutory subject matter and, therefore, the rejection under 35 U.S.C. § 101 should be withdrawn.

III. Claim Rejections - 35 U.S.C. § 102

Claims 25-30 and 34-46 stand rejected under 35 U.S.C. § 102(e) as being unpatentable in view of U.S. Patent No. 6,826,727 issued to Mohr et al. (hereinafter referred to as “Mohr”). As disclosed below in more detail, Mohr does not teach or suggest the subject matter of these claims.

1. Independent Claim 25

Amended independent Claim 25 recites:

A computer readable medium having instructions for generating instances of a document based on a template structured according to a schema, the schema comprising:

a template root element;

a template information element;

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template; and

an instances element including at least one instance element.

Among other elements, Mohr does not teach or suggest “a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template” and “an instances element including at least one instance element,” as recited in amended Claim 1.

In contrast, Mohr discloses a “computerized system [that] lays out document templates represented as a tree of text and shape elements, including variable elements.” Abstract. Each shape element has a maximize or minimize property in one or more dimensions, and when content is mapped into a shape element, the layout makes shape elements with minimize properties as small as possible and makes shape elements with maximize properties as large as possible. Abstract. Therefore, the system disclosed in Mohr resizes document components according to the values or content mapped into the document.

As described in Mohr, each shape element can have a “flex-height-behavior attribute [that] can be set to one of five values: ‘none’ 256, ‘maximize’ 258, ‘minimize’ 260, ‘proportional’ 262, and ‘source size’ 263. ... If the flex-height behavior [attribute] is ‘none’ that means the shape has a fixed height If the user selects the ‘maximize’ flex-height behavior, the layout process will try to ‘maximize’ the height of the shape, that is, to have it take up all available space during the layout process, up to the height defined by the Flex Height Maximum attribute 244 shown in FIG. 10. If the user selects the ‘minimize’ value for the flex-height behavior, the shape's height will be as small as possible as allowed by either the size of the shapes contents plus the shape's internal top and bottom margin attribute values 220 and 230 shown in FIG. 9, or the value of its Flex Height Minimum attribute 243 shown in FIG. 10, whichever is larger.” Col. 18, lines 26-56.

Accordingly, Mohr teaches automatically sizing content (e.g., text or images) to a particular size (e.g., a fixed size, a maximum size, or a minimum size). Mohr does not teach or suggest providing an “instances [plural] element” that contains at least one “instance [singular] element.”

As noted in the specification of the present application,

the instances element 308 describes how each individual instance of the document is constructed. The instances element 308 includes a single instance element 340 at authoring time. The abstract instance is replicated into a plurality of instances at transaction time.

Para. 86 of the Specification. As also noted in the specification,

[t]he data table element 306 includes, in some embodiments, all the data values to be used in a specific instance of a template 302. In one embodiment of the invention, the data table element 306 defines a structure of data values that can be accessed by name, or by a combination of name and one or more indices. The data in the data table element 306 drives the application of . . . rules to transform an abstract instance of the template 302 into one or more concrete instances and to assign data values to data targets.

Mohr does not include a structure or architecture that automatically determines the number of instances of a document template based on the data provided. Mohr is simply resizing content. Thus, claim 25 is allowable. Claims 26-30, which depend from independent Claim 25, are also allowable for at least these reasons. Claim 26 is also allowable for additional reasons discussed below.

Claim 26 further defines the “instance element.” According to Claim 26, the “instance element is configurable to include an instance data table element, a pages element, an overlays element, and a continuations element.” Mohr does not disclose using continuations to handle content that does not fit in a particular area or element. In fact, Mohr teaches away from handling continuations for overflows of data or content, since continuations never occur in the system disclosed in Mohr. The content or data is always sized to fit within the mapped shape element. Therefore, there are never any continuations or overflows to handle.

As noted in the present application,

[c]ontinuations elements tell a processor how to handle overflows. An overflow condition can be created when the data value to be assigned to a field target cannot be drawn in the available space according to the attributes governing that

space. Overflow handling is defined as part of the contents of an instance element 340. An instance element 340 can have any number of pages, but the overflow handling is independent of those pages. When data for a text target requires more space than is available, a continuation event occurs. Continuation handling falls into three categories. The first of these is a no continuation handling condition, where fields are handled on their original page. Under a no conditional handling condition attributes may specify font reduction that may be applied. The second type of continuation handling is structured handling, where handling of rich data structures such as tables or parties in a tabular format is required on the continuation page. A third type of continuation handling is unstructured handling, where simple data items such as a property description are handled. In an unstructured handling condition several such fields may be continued to the same continuation page and arranged in order along with a caption for each value, a potential forwarding message, and other attributes.

Para. 88 of the Specification.

Consequently, continuation elements provide instructions on how to handle data or content that does not fit within its specified structure or data target. Since Mohr discloses always fitting content within its specified structure, Mohr clearly does not teach or suggest an “instance element [that] is configurable to include an instance data table element, a pages element, an overlays element, and a continuations element” as recited in amended Claim 26.

2. Independent Claims 34 and 52.

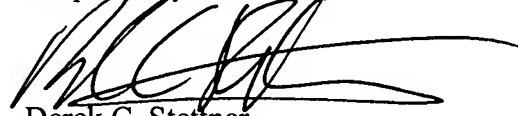
As amended, independent Claim 34 includes some limitations that are similar to those that are in Claims 25 and 26. As such, Claim 34 is allowable for reasons that are similar to the reasons that Claims 25 and 26 are allowable. The claims that depend on Claim 34 are allowable for at least the same reasons.

Regarding new Claim 52, it is similar to Claim 25 and is allowable for similar reasons.

IV. Conclusion

In light of the above, Applicant believes that the application is in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. Applicant also requests that the Examiner telephone the attorneys of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Derek C. Stettner', is written over the typed name.

Derek C. Stettner

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